Listing of Claims:

1. (Currently amended): A method in a data processing system for managing traffic in a network data processing system, the method comprising:

monitoring the traffic for a plurality of ~~network paths~~ TCP connections or UDP associations through a given network path; and

responsive to a packet for a particular ~~network path~~ TCP connection or UDP association within the plurality of ~~network paths~~ TCP connections or UDP associations causing the traffic for the ~~particular~~ network path to exceed a level of traffic allowed, reducing an amount of bandwidth available to one of the particular ~~network path~~ TCP connection or UDP association and another TCP connection or UDP association using an action based on a transmission protocol ~~used by~~ corresponding to the ~~particular network path~~ one TCP connection or UDP association~~, wherein the action used varies for different transmission protocols~~.

2. (Previously presented): The method of claim 1, wherein the traffic is monitored using at least one of a data transfer rate, peak data transfer rate, burst size, and maximum packet size.

3. (Currently Amended): The method of claim 1, wherein when the one TCP connection or UDP association comprises a TCP connection the action comprises:

reducing a congestion window size by multiplying the amount of bandwidth available by a dynamic variable that is adjusted using changing requirements of the ~~particular~~ network path to reduce the amount of bandwidth available based on a fair share for the ~~particular network path~~ one TCP connection.

4. (Currently Amended): The method of claim 3, wherein the congestion window size is reduced as follows:

CW = max(MinW, min(CW*F,MaxW))

wherein CW is the congestion window size, MinW is a minimum congestion window size for the ~~particular network path~~ one TCP connection, MaxW is a maximum congestion window size for

the ~~particular network path~~ one TCP connection, and F is the dynamic variable ~~used to adjust the congestion window size for the particular network path~~.

5. (Currently Amended): The method of claim 1, wherein the action comprises:
setting a quality of service for packets ~~sent using the particular network path~~.

6. (Previously presented): The method of claim 1, wherein the action comprises:
dropping the packet.

7. (Currently amended): A method in a data processing system for managing traffic in a network data processing system, the method comprising:

monitoring ~~aggregate~~ traffic for each of a plurality of ~~network paths~~ TCP connections or UDP associations through a given network path; and

responsive to the ~~aggregate~~ traffic for a selected ~~network path~~ TCP connection or UDP association exceeding a threshold, reducing the ~~aggregate~~ traffic for the selected ~~network path~~ TCP connection or UDP association using an action based on a transmission protocol ~~used by~~ corresponding to the selected TCP connection or UDP association ~~network path, wherein the action varies for different transmission protocols~~.

8. (Previously presented): The method of claim 7, wherein the ~~aggregate~~ traffic comprises at least one of a data transfer rate, peak data transfer rate, burst size, and maximum packet size.

9. (Currently Amended): The method of claim 7, wherein when the selected TCP connection or UDP association comprises a selected TCP connection the action comprises:

reducing a congestion window size by multiplying an amount of ~~aggregate~~ traffic by a dynamic variable that is adjusted using changing requirements of the ~~selected~~ network path to reduce the ~~aggregate~~ traffic for the selected ~~network path~~ TCP connection.

10. (Previously presented): The method of claim 7, wherein the action comprises:

reducing a sending size for data packets.

11. (Deleted)

12. (Currently amended): The method of claim 7, wherein the threshold takes into account a fair share of bandwidth available for the plurality of ~~network paths~~ TCP connections or UDP associations.

13. (Currently amended): A data processing system comprising:

a bus system;

a communications unit connected to the bus, wherein data is sent and received using the communications unit;

a memory connected to the bus system, wherein a set of instructions are located in the memory; and

a processor unit connected to the bus system, wherein the processor unit executes the set of instructions to monitor traffic for a plurality of ~~network paths~~ TCP connections or UDP associations through a given network path; and reduce an amount of bandwidth available to one of a particular ~~network path~~ TCP connection or UDP association and another TCP connection or UDP association using an action based on a transmission protocol ~~used by~~ corresponding to the ~~particular network path~~ one TCP connection or UDP association in response to a packet for the particular ~~network path~~ TCP connection or UDP association within the plurality of ~~network paths~~ TCP connections or UDP associations causing the traffic for the ~~particular~~ network path to exceed a level of traffic allowed~~, wherein the action varies for different transmission protocols~~.

14. (Previously presented): The data processing system of claim 13, wherein the bus system comprises a primary bus and a secondary bus.

15. (Previously presented): The data processing system of claim 13, wherein the processor

unit comprises a single processor.

16. (Previously presented): The data processing system of claim 13, wherein the processor unit comprises a plurality of processors.

17. (Original): The data processing system claim 13, wherein the communications unit is an Ethernet adapter.

18. (Currently amended): A data processing system comprising:

a bus system;

a communications unit connected to the bus, wherein data is sent and received using the communications unit;

a memory connected to the bus system, wherein a set of instructions are located in the memory; and

a processor unit connected to the bus system, wherein the processor unit executes the set of instructions to monitor ~~aggregate~~ traffic for each of a plurality of ~~network paths~~ TCP connections or UDP associations through a given network path; and reduce the ~~aggregate~~ traffic for a selected ~~network path~~ TCP connection or UDP association using an action based on a transmission protocol ~~used by~~ corresponding to the selected ~~network path~~ TCP connection or UDP association in response to the ~~aggregate~~ traffic for the selected ~~network path~~ TCP connection or UDP association exceeding a threshold~~, wherein the action varies for different transmission protocols~~.

19. (Previously presented): The data processing system of claim 18, wherein the bus system comprises a primary bus and a secondary bus.

20. (Previously presented): The data processing system of claim 18, wherein the processor unit comprises a single processor.

21. (Previously presented): The data processing system of claim 18, wherein the processor unit comprises a plurality of processors.

22. (Original): The data processing system claim 18, wherein the communications unit is an Ethernet adapter.

23. (Currently amended): A data processing system for managing traffic in a network data processing system, the data processing system comprising:

means for monitoring the traffic for a plurality of ~~network paths~~ TCP connections or UDP associations through a given network path; and

means for reducing, responsive to a packet for a particular ~~network path~~ TCP connection or UDP association within the plurality of ~~network paths~~ TCP connections or UDP associations causing the traffic for the ~~particular~~ network path to exceed a level of traffic allowed, an amount of bandwidth available to one of the particular ~~network path~~ TCP connection or UDP association and another TCP connection or UDP association using an action based on a transmission protocol ~~used by~~ corresponding to the ~~particular~~ one TCP connection or UDP association ~~network path, wherein the action varies for different transmission protocols~~.

24. (Previously presented): The data processing system of claim 23, wherein the traffic is monitored using at least one of a data transfer rate, peak data transfer rate, burst size, and maximum packet size.

25. (Currently amended): The data processing system of claim 23, wherein when the one TCP connection or UDP association comprises a TCP connection the action comprises:

reducing a congestion window size by multiplying the amount of bandwidth available by a dynamic variable that is adjusted using changing requirements of the ~~particular~~ network path to reduce the amount of bandwidth available based on a fair share for the ~~particular network path~~ one TCP connection.

26. (Currently amended): The data processing system of claim 25, wherein the congestion window size is reduced as follows:

CW = max(MinW, min(CW*F,MaxW))

wherein CW is the congestion window size, MinW is a minimum congestion window size for the ~~particular network path~~ one TCP connection, MaxW is a maximum congestion window size for the ~~particular network path~~ one TCP connection, and F is the dynamic variable ~~used to adjust the particular network path~~.

27. (Currently amended): The data processing system of claim 23, wherein the action comprises:

means for setting a quality of service for packets ~~sent using the particular network path~~.

28. (Previously presented): The data processing system of claim 23, wherein the action comprises:

means for dropping the packet.

29. (Currently amended): A data processing system for managing traffic in a network data processing system, the data processing system comprising:

means for monitoring ~~aggregate~~ traffic for each of a plurality of ~~network paths~~ TCP connections or UDP associations through a given a network path; and

means for reducing, responsive to the ~~aggregate~~ traffic for a selected ~~network path~~ TCP connection or UDP association exceeding a threshold, the ~~aggregate~~ traffic for the selected ~~network path~~ TCP connection or UDP association using an action based on a transmission protocol ~~used by~~ corresponding to the selected TCP connection or UDP association ~~network path, wherein the action varies for different transmission protocols~~.

30. (Previously presented): The data processing system of claim 29, wherein the ~~aggregate~~ traffic comprises at least one of a data transfer rate, peak data transfer rate, burst size, and maximum packet size.

31. (Currently amended): The data processing system of claim 29, wherein when the selected TCP connection or UDP association comprises a selected TCP connection the action comprises:

reducing a congestion window size by multiplying an amount of ~~aggregate~~ traffic by a dynamic variable that is adjusted using changing requirements of the ~~selected~~ network path to reduce the ~~aggregate~~ traffic for the selected ~~network path~~ TCP connection.

32. (Previously presented): The data processing system of claim 29, wherein the action comprises:

means for reducing a sending size for data packets.

33. (Currently amended): The data processing system of claim 29, wherein the action comprises changing a quality of service for data packets ~~for the selected network path~~.

34. (Currently amended): The data processing system of claim 29, wherein the threshold takes into account a fair share of bandwidth available for the plurality of ~~network paths~~ TCP connections or UDP associations

35. (Currently amended): A computer program product for managing traffic in a network data processing system, the computer program product comprising:

a computer readable medium having computer usable program code embodied therein, the computer readable medium comprising:

computer usable program code configured to monitor the traffic for a plurality of ~~network paths~~ TCP connections or UDP associations through a given network path;

computer usable program code configured to reduce an amount of bandwidth available to one of a particular ~~network path~~ TCP connection or UDP association and another TCP connection or UDP association using an action based on a transmission protocol ~~used by~~ corresponding to the ~~particular network path~~ one TCP connection or UDP association in

response to a packet for the particular ~~network path~~ TCP connection or UDP association within the plurality of ~~network paths~~ TCP connections or UDP associations causing the traffic for the ~~particular~~ network path to exceed a level of traffic allowed~~, wherein the action varies for different transmission protocols~~.

36. (Previously presented): The computer program product as recited in claim 35, wherein the traffic is monitored using at least one of a data transfer rate, peak data transfer rate, burst size, and maximum packet size.

37. (Currently amended): The computer program product as recited in claim 35, wherein when the one TCP connection or UDP association comprises a TCP connection the action comprises:

reducing a congestion window size by multiplying an amount of bandwidth available by a dynamic variable that is adjusted using changing requirements of the ~~particular~~ network path to reduce the amount of bandwidth available based on a fair share for the ~~particular network path~~ one TCP connection.

38. (Currently amended): The computer program product as recited in claim 37, wherein the congestion window size is reduced as follows:

CW = max(MinW, min(CW*F,MaxW))

wherein CW is the congestion window size, MinW is a minimum congestion window size for the ~~particular network path~~ one TCP connection, MaxW is a maximum congestion window size for the ~~particular network path~~ one TCP connection, and F is the dynamic variable ~~used to adjust the particular network path~~.

39. (Currently amended): The computer program product as recited in claim 35, wherein the action comprises:

setting a quality of service for packets ~~sent using the particular network path~~.

40. (Previously presented): The computer program product as recited in claim 35, wherein the action comprises:

dropping the packet.

41. (Currently amended): A computer program product for managing traffic in a network data processing system, the computer program product comprising:

a computer readable medium having computer usable program code embodied therein, the computer readable medium comprising:

computer usable program code configured to monitor ~~aggregate~~ traffic for each of a plurality of ~~network paths~~ TCP connections or UDP associations through a given network path; and

computer readable program code configured to reduce the ~~aggregate~~ traffic for a selected ~~network path~~ TCP connection or UDP association using an action based on a transmission protocol ~~used by~~ corresponding to the selected ~~network path~~ TCP connection or UDP association in response to the ~~aggregate~~ traffic for the selected ~~network path~~ TCP connection or UDP association exceeding a threshold~~, wherein the action varies for different transmission protocols~~.

42. (Previously presented): The computer program product as recited in claim 41, wherein the ~~aggregate~~ traffic comprises at least one of a data transfer rate, peak data transfer rate, burst size, and maximum packet size.

43. (Currently amended): The computer program product as recited in claim 41, wherein when the selected TCP connection or UDP association comprises a selected TCP connection the action comprises:

reducing a congestion window size by multiplying an amount of ~~aggregate~~ traffic by a dynamic variable that is adjusted using changing requirements of the ~~selected~~ network path to reduce the ~~aggregate~~ traffic for the selected ~~network path~~ TCP connection.

44. (Previously presented): The computer program product of claim 41, wherein the action comprises:

reducing a sending size for data packets.

45. (Currently amended): The computer program product of claim 41, wherein the action comprises:

changing a quality of service for data packets ~~for the selected network path~~.

46. (Currently amended): The computer program product of claim 41, wherein the threshold takes into account a fair share of bandwidth available for the plurality of ~~network paths~~ TCP connections or UDP associations.

47. (New) The method of claim 1, wherein said monitoring comprises monitoring at a server the traffic for the plurality of TCP connections or UDP associations through a given network.